

REMARKS

Applicants thank the Examiner for the very thorough consideration given the present application.

Claims 1, 3-8, 10, 11, 13-15, 17-25, 27 and 28 are now present in this application. Claims 1, 8, 13, 17, and 22 are independent. By this Amendment, claims 1, 8, 10, 13, 17, 22, 27 and 28 are amended. No new matter is involved.

Reconsideration of this application, as amended, is respectfully requested.

CLAIM OBJECTIONS

Claims 5, 8, 10, 13 and 27 are objected to. Applicants respectfully traverse these objections.

The Office Action asserts that it is unclear whether "a second hinge portion" recited in the second paragraph of claim 5 is the same as "a second hinge portion" recited in the first paragraph of claim 5.

Applicants respectfully submit that "a second hinge portion" is not found in the first paragraph of claim 5. That language is only found in the second paragraph of claim 5.

Clarification is requested.

The language in claims 8 and 13, "to a limited extent," is criticized because it is not understood what range of motion is described by this language. Applicants have amended claims 8 and 13 to delete the criticized language, thus mooted this issue.

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The language of claim 10 said to lack antecedent basis and to be unclear has been amended to correct those issues.

Claims 27 have been objected to because of a claim dependency issue, duplicate numbering, and because the language "the stopping pin of the reinforcing member" lacks antecedent basis. Amendments have been made to both claim 27s to resolve these issues.

Accordingly, reconsideration and withdrawal of these claim objections are respectfully requested.

REJECTION UNDER 35 U.S.C. § 102

Claims 1 and 3-7 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,483,756 to Heyder. This rejection is respectfully traversed.

Anticipation under 35 U.S.C. § 102(b) requires that "each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros., Inc. v. Union Oil Co., 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987).

If the prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if that element is "inherent" in its disclosure. To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268, 20

USPQ2d 1746, 1749 (Fed. Cir. 1991). "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Id.* at 1269, 20 USPQ2d at 1749 (quoting *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (C.C.P.A. 1981)).

Claim 1 has been amended to positively recite a combination of features including wherein the case has a convex portion with a recess for receiving a nut and a reinforcing member has a flat board shape and a convex portion for receiving the convex portion of the case with a recess for receiving a nut for reinforcing stiffness of the case when the shaft is engaged therewith and the reinforcing member is mounted at an outer surface of the case.

Support for this amendment is found in the Application as originally filed, including Figs. 4-8 and the portions of the specification that describe these figures.

The Office Action states, for example, that Heyder's reinforcing member (2) has a flat board shape at upper and lower ends thereof. Applicants respectfully submit that this is an incorrect characterization of Heyder's housing (2), which is clearly shown in Fig. 2 as having a bowl shape which, by definition, is not flat.

Nor does Heyder's housing 2 have a convex portion for receiving a convex portion of its back wall 1. Instead, housing 2's convex portion does not receive the convex portion of back wall 1, but butts up against it because the curvature of housing 2 is opposite to the curvature of back wall 1, so that housing 2 cannot possibly receive the convex portion of back wall 1.

Accordingly, Heyder does not anticipate the invention recited in claim 1.

With respect to claims 3-7, these claims contain all of the features recited in claim 1 and for at least that reason, claims 3-7 are not anticipated by Heyder.

Reconsideration and withdrawal of this rejection of claims 1 and 3-7 are respectfully requested.

REJECTION UNDER 35 U.S.C. § 103

Claims 8, 10, 13-15, 17, 19-25, 27 and 28 stand rejected under 35 USC §103(a) as being unpatentable over Heyder in view of U.S. Patent 763,821 to Wesson. This rejection is respectfully traversed.

Because the rejection is based on 35 U.S.C. §103, what is in issue in such a rejection is "the invention as a whole", not just a few features of the claimed invention. Under 35 U.S.C. §103, "[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." The determination under section 103 is whether the claimed invention as a whole would have been obvious to a person of ordinary skill in the art at the time the invention was made. See In re O'Farrell, 853 F.2d 894, 902, 7 USPQ2d 1673, 1680 (Fed. Cir. 1988). In determining obviousness, the Examiner must explain what the differences between the claimed invention and the prior art are and provide objective factual evidence to support a conclusion that it would be obvious to one of ordinary skill in the art to achieve the claimed

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invention, which includes those missing features.

In the second place, in rejecting claims under 35 U.S.C. §103, it is incumbent on the examiner to establish a factual basis to support the legal conclusion of obviousness. See, In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one of ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. F-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. Note, In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be suggested or taught by the prior art. In re Royka, 490 F.2d 981, 180

USPQ 580 (CCPA 1970). All words in a claim must be considered in judging the patentability of that claim against the prior art. In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

A showing of a suggestion, teaching, or motivation to combine the prior art references is an “essential evidentiary component of an obviousness holding.” C.R. Bard, Inc. v. M3 Sys. Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232(Fed. Cir. 1998). This showing must be clear and particular, and broad conclusory statements about the teaching of multiple references, standing alone, are not “evidence.” See In re Dembiczak, 175 F.3d 994 at 1000, 50 USPQ2d 1614 at 1617 (Fed. Cir. 1999).

Moreover, a factual inquiry whether to modify a reference must be based on objective evidence of record, not merely conclusory statements of the Examiner. See, In re Lee, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002).

Initially, Applicants respectfully submit that Heyder does not disclose a number of features of the claimed invention.

Claims 8 and 10, as amended, positively recite a combination of features, including a base nut having a flat disc shape installed at a convex portion of the case with a recess for receiving the base nut, and a plurality of engaging protrusions spaced from one another with a certain interval therebetween around the outer circumference of the base nut for engagement with a stopping pin through an insertion groove formed at the convex portion of the case with a recess for receiving the base nut.

The Office Action asserts that the unlabeled spacer located around shaft 3 and located between elements 4 and 5 of Heyder is the claimed base nut having a disc shape installed at a nut-installed portion of the case. Applicants respectfully disagree. Claim 8, as amended, recites that the base nut has a flat disc shape, and the unlabeled spacer element of Heyder clearly does not have a flat disc shape.

The Office Action also admits that Heyder does not disclose a plurality of protrusions around the outer circumference of the base nut to engage a stopping pin.

In an attempt to provide the recited protrusions and stopping pin features of the claims, the Office Action turns to Wesson, which is directed to a locknut to prevent nuts from rotating backwards. Wesson's locknut has a bolt 10 with a keyway 11, and two nuts, i.e., a base nut 12 with several radial recesses 13, and a guard nut 15 with a plurality of peripheral recesses. Wesson also has a malleable key 16.

The Office Action then concludes that it would have been obvious to modify Heyder to include the nut lock arrangement of Wesson "to prevent the nut from rotating backwards and loosening the connection."

Applicants respectfully disagree with this speculative conclusion for a number of reasons.

Firstly, the Office Action is completely silent as to exactly how Heyder is to be modified, i.e., what parts of Heyder are to be modified and in what way.

Secondly, because Heyder discloses no problem with its hex nut 4 loosening, the Office Action has not explained why one of ordinary skill in the art would be properly motivated to modify Heyder as suggested.

Thirdly, Applicants respectfully submit that one of ordinary skill in the art would not be motivated to go to the trouble and expense of significantly modifying Heyder's journal and hex nut to provide the keyway, radial recesses and peripheral recesses of Wesson in Heyder's device to prevent possible hex nut slippage when an ordinary lock washer could be provided between Heyder's hex nut 4 and housing 2 if slippage of the hex nut occurred.

Fourthly, even if Heyder were modified in view of Wesson, as suggested, the resulting modified version of Heyder would not disclose, or suggest or otherwise render obvious the claimed invention, because the claimed invention recites that the base nut is located between the ball bearing and the case (claims 8, 10 and 11), or is located at an inner surface of the case (claims 13-15 and 17-21) and Heyder's hex nut is located on the other side of the case from the ball joint and at the outside of Heyder's case.

Furthermore, method claims 22-25, 27 and 28 clearly point out that the nut coupled to the end portion of the shaft is different than the separately recited shaft fixing member, whereas in the Office Action's proposed modification of Heyder in view of Wesson, only the nut coupled to the end portion of Heyder's journal is sought to be modified.

Additionally, claims 13, 17 and 22 all positively recite the stopping pin engaged with the engaging protrusions through an insertion groove formed at the case, a feature neither disclosed nor suggested by any of the applied references.

Accordingly, the Office Action fails to provide a *prima facie* case that the claimed invention is rendered obvious by Heyder taken in view of Wesson.

Reconsideration and withdrawal of this rejection of claims 8, 10, 13-15, 17, 19-25, 27 and 28 are respectfully requested.

CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Accordingly, Applicants respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Robert J. Webster, Registration No. 46,472, at (703) 205-8000, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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